

REMARKS

Introduction

In response to the Office Action dated February 11, 2008, Applicants have amended claims 1 and 4. Support for amended claim 1 is found in, for example, pg. 11, lines 7-10 and pg. 12, lines 1-5. Claim 4 has been amended to provide antecedent support for “porous setter.” Care has been taken to avoid the introduction of new matter. In view of the foregoing amendments and the following remarks, Applicants respectfully submit that all pending claims are in condition for allowance. It is noted that the Advisory Action mailed April 21, 2008 stated that the Declaration under 37 C.F.R. § 1.132 was entered.

Claim Rejections Under 35 U.S.C. § 102/103

Claims 1, 4, and 5 are rejected under 35 U.S.C. § 102 for lack of novelty, or alternatively, under 35 U.S.C. § 103 for obviousness over Harris et al. (U.S. 5,424,261). Claims 1, 4, and 5 are rejected under 35 U.S.C. § 102 for lack of novelty, or alternatively, under 35 U.S.C. § 103 for obviousness over Sugiura et al. (U.S. 5,165,983 – hereinafter Sugiura). Claims 1, 4, and 5 are rejected under 35 U.S.C. § 102 for lack of novelty, or alternatively, under 35 U.S.C. § 103 for obviousness over Japanese Document 08157265. Claims 1, 4, and 5 are rejected under 35 U.S.C. § 102 for lack of novelty, or alternatively, under 35 U.S.C. § 103 for obviousness over Japanese Document 5-229873. Claims 1, 4, and 5 are rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent Nos. 4,920,640 (hereinafter Enloe ‘640) and 5,017,434 (hereinafter Enloe ‘434), each taken alone.

The Office Action asserts that the comparative example in the Declaration is not considered to be representative of the teachings of the prior art references for the following

reasons. The Office Action states that none of the references applied in the rejections use a glassy carbon setter, which is used in the comparative example. The Examiner avers that Sugiura, JP 08157265, JP 5-229873 and Enloe use BN materials like the instant invention. The Office Action further asserts that the Applicants have not shown that the warpage in the bodies taught by Sugiura is greater than that claimed. The Office Action states that heating at 1700-1800°C for 2 hours is not equivalent to heating to 850°C as required in the claims. Applicants request reconsideration and withdrawal of the rejections.

The temperature of 1850°C found in Table 1a of the Declaration clearly describes the sintering temperature. According to the claimed subject matter per claim 1, the sintering step is *before* a heat treatment step of 850°C in the atmosphere for one hour. As discussed in Paragraph 5 of the Declaration, the samples were heat-treated at 850°C for an hour in a non-oxidative atmosphere according to an embodiment of the claimed subject matter. An aspect of the present application includes the sintering step, which **precedes** the heat-treatment step (*see, e.g.*, Fig. 1 and pg. 16, lines 2-15 and pg. 17, lines 3-5 of the originally filed specification). None of the cited references disclose or suggest a single heat treatment at 850°C in the atmosphere after sintering, as required in claim 1.

It is **not** disputed on this record that **none** of the applied references, taken alone or in combination, recognize let alone address the **problem** of increment in warp after heat treatment, much less even hint that it is related in any way to the **uniformity of sintering agents (a/b)** as **specifically recited in claim 1**.

As set forth on page 20 of the written description, lines 6 et seq., the data in Table 2 demonstrates the benefits of the present invention attendant upon employing a porous setter. The reported warp after sintering and increment in the warp after heat treatment of the examples

representative of the present invention are significantly superior to the warp after sintering and increment in the warp after heat treatment of the comparative examples. One having ordinary skill in the art would understand from Table 2 what is meant by significantly reduced warp after sintering and reduced increment in warp after heat treatment based upon such comparative data.

None of the applied references disclose a porous setter made of high melting-point permeable metal or ceramic, as required by amended claim 1.

This being the case, it must follow **none** of the applied references, taken alone or in combination, hint at solving the warpage problem by uniformly distributing sintering agents throughout a sintered ceramic base material, let alone by employing a porous setter, as in the claimed invention. Clearly, there is no factual basis upon which to predicate the determination that any of the applied references inherently, i.e., **necessarily**, discloses or suggests the claimed invention. Rejections predicated upon inherency cannot rely on **uncertainties or happenstance**. *Crown Operations International Ltd. v. Solutia Inc.*, 289 F.3d 1367, 62 USPQ2d 1917 (Fed. Cir. 2002); *Finnegan Corp. v. ITC*, 180 F.3d 1354, 51 USPQ2d 1001 (Fed. Cir. 1999); *In re Robertson*, 169 F.3d 743, 49 USPQ2d 1949 (Fed. Cir. 1999); *Electro Medical Systems S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 32 USPQ2d 1017 (Fed. Cir. 1994).

As anticipation under 35 U.S.C. § 102 requires that each and every element of the claim be disclosed, either expressly or inherently (noting that “inherency may not be established by probabilities or possibilities,” *Scaltech Inc. v. Retec/Tetra*, 178 F.3d 1378 (Fed. Cir. 1999)), in a single prior art reference, *Akzo N.V. v. U.S. Int’l Trade Commission*, 808 F.2d 1471 (Fed. Cir. 1986), based on the forgoing, it is submitted that the cited references do not anticipate claim 1, nor any claim dependent thereon. The dependent claims are allowable for at least the same reasons as claim 1.

Based upon the arguments submitted *supra*, it should be apparent that a *prima facie* basis to deny patentability to the claimed invention has not been established for want of the requisite factual basis. Moreover, there are potent indicia of nonobviousness of record to support the patentability of the present claimed subject matter. Indeed, the advantageous effect of the present invention in the smooth surface of the setter suppresses the distortion of the formed body during sintering, is unknown to the prior art of record. Accordingly, the rejection of claims 1, 4, and 5 should be withdrawn.

Double Patenting Rejection

Claims 1, 4, and 5 are rejected under 35 U.S.C. § 101 as claiming the same invention as that of claims 1, 4, and 5 of U.S. Patent Serial No. 11/907,020.

Applicants respectfully request that the Examiner hold this rejection in abeyance until allowable subject matter is obtained in the present application.

Conclusion

In view of the above amendments and remarks, Applicants submit that this application should be allowed and the case passed to issue. If there are any questions regarding this Amendment or the application in general, a telephone call to the undersigned would be appreciated to expedite the prosecution of the application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper,

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including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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